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EXAMINER

URICK, MATTHEW T

ART UNIT PAPER NUMBER

2113

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/804,275	Applicant(s) CONNELLY ET AL.	
	Examiner Matt Urick	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 7, 8, and 10 are objected to because of the following informalities:

Claim 7 contains the step "The method of claim 2, further comprising...synchronizing the local repository and the central repository..." but there is no local repository in claim 2. Since claim 3 contains the limitation "local repository," claim 7 is instead assumed to be dependant on claim 3.

Claim 8 contains the step "The method of claim 6, wherein the synchronizing step..." but there is no synchronizing step in claim 6. Since claim 7 contains the limitation "synchronizing..." claim 8 is instead assumed to be dependant on claim 7.

Claim 10 contains the step "The method of claim 6, wherein the synchronizing step..." but there is no synchronizing step in claim 6. Since claim 7 contains the limitation "synchronizing..." claim 8 is instead assumed to be dependant on claim 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2113

Claims 1, 3, 5-13, 15, 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller (United States Patent 6,742,141 B1).

As per claim 1, Miller discloses:

A method for analyzing the root cause of system failures on one or more computers, comprising:

generating an event when a computer system detects a system failure (column 12 lines 53-55);

determining the cause of the system failure (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found);

transmitting the event, including the determined cause, from the computer system to a central repository (column 13 lines 27-32); and

analyzing the system failure event in the central repository (column 13 lines 27-32).

As per claim 3, Miller discloses:

The method of claim 1, further comprising: storing the event in a local repository located on the computer system (column 13 lines 23-32).

As per claim 5, Miller discloses:

Art Unit: 2113

The method of claim 1, further comprising: determining if the system failure was due to a hardware problem by analyzing a file log (column 9 lines 43-53: recent logs are useful for diagnostic purposes, column 6 lines 30-42, hardware logs are stored).

As per claim 6, Miller discloses:

The method of claim 1, further comprising: determining if the system failure was due to a software problem by analyzing system core files (column 9 lines 39-43: registry files are monitored).

As per claim 7, Miller discloses:

The method of claim 2, further comprising:
assigning a sequence number to each event generated (column 17 lines 27-40);
receiving a status request from the central repository (column 17 lines 39-40);
and
synchronizing the local repository and the central repository if the sequence number does not match the expected sequence number (column 17 lines 40-54).

As per claim 8, Miller discloses:

The method of claim 6, wherein the synchronizing step further comprises:
transmitting missing events in the central repository from the computer system (column 19 lines 40-42, lines 57-58: additional support may be used if a solution to an event cannot be found; column 19 line 64 - column 20 line 18: a remote operator works in

Art Unit: 2113

conjunction with the customer site to create a new entry for the master knowledge base).

As per claim 9, Miller discloses:

The method of claim 8, wherein the synchronizing step further comprises: transmitting missing events in the local repository from the central repository (column 18 lines 5-10).

As per claim 10, Miller discloses:

The method of claim 6, wherein the synchronizing step further comprises: discarding events that have already been received (column 18 lines 5-10).

As per claim 11, Miller discloses:

The method of claim 1, further comprising, retransmitting the information stored in the central repository to another computer system for further analysis (column 11 lines 14-21: master knowledge base may be part of a cluster computing system, or incorporate a backup knowledge base at another location).

As per claim 12, Miller discloses:

An apparatus for analyzing the root cause of system failures on one or more computers, comprising:

a network (figure 7 item 122);

Art Unit: 2113

a local support computer coupled to said network (figure 7 item 120); and
a computer system coupled to the network (figure 7 item 124), said computer system programmed to monitor itself and another computer system for system failures (column 4 lines 12-27), to determine the cause of the system failure, and to transmit system failure events to said local support computer (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found).

As per claim 13, Miller discloses:

An apparatus of claim 12, further comprising: the local support computer programmed to collect and analyze the system failure information (column 13 lines 27-32).

As per claim 15, Miller discloses:

An apparatus of claim 12, further comprising: the computer system programmed to store the event in a local repository located on the computer system (column 13 lines 23-32).

As per claim 17, Miller discloses:

An apparatus of claim 12, further comprising: the computer system programmed to determine if the system failure was due to a hardware problem by analyzing a file log (column 9 lines 43-53: recent logs are useful for diagnostic purposes, column 6 lines 30-

Art Unit: 2113

42, hardware logs are stored).

As per claim 18, Miller discloses:

An apparatus of claim 12, further comprising: the computer system programmed to determine if the system failure was due to a software problem by analyzing system core files (column 9 lines 39-43: registry files are monitored).

As per claim 19, Miller discloses:

An apparatus of claim 14, further comprising:

the computer system programmed to assign a sequence number to each event generated (column 17 lines 27-40);

the local support computer programmed to send a status request to the computer system (column 17 lines 39-40), and

to synchronize the local repository with the local support computer if the sequence number does not match the expected sequence number (column 17 lines 40-54).

As per claim 20, Miller discloses:

An apparatus of claim 12, further comprising: a remote support computer connectable to the local support computer for receiving system failure data from said local support computer (column 11 lines 14-21: master knowledge base may be part of a cluster computing system, or incorporate a backup knowledge base at another

location).

As per claim 21, Miller discloses:

A means for analyzing the root cause of system failures on one or more computers, comprising:

a means for transmitting data from one computer to another (figure 7 item 122),

a local support computer coupled to said means for transmitting data (figure 7 item 120),

a computer system coupled to said means for transmitting data (figure 7 item 124),

a means for said computer system to monitor itself or another computer system (column 4 lines 12-27), for system failures and determining the causes of said failures, a means for transmitting the causes of said failures to the local support computer (column 12 lines 55-67; column 13 lines 10-21, parameters are gathered and symptom codes are run until an applicable solution is found).

As per claim 22, Miller discloses:

A means for analyzing the root cause of system failures on one or more computers, of claim 21, further comprising: a remote support computer, a means for transmitting system failure information from the local support computer to the remote

Art Unit: 2113

support computer (column 11 lines 14-21: master knowledge base may be part of a cluster computing system, or incorporate a backup knowledge base at another location).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (United States Patent 6,742,141 B1) in view of Null (Null, Linda: The Essentials of Computer Organization and Architecture. © 2003 Jones and Bartlett).

As per claim 2, Miller fails to disclose:

The method of claim 1, further comprising: re-transmitting the event if a receipt confirmation message is not received from the central repository.

Null discloses that TCP – a well known internet protocol in the art (page 512, section 11.5) – is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network

Art Unit: 2113

may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

As per claim 4, Miller fails to disclose:

The method of claim 1, further comprising: holding the event in a queue if a receipt confirmation message is not received from the central repository; and re-transmitting the events in the queue after a period of time.

Null discloses that TCP – a well known internet protocol in the art (page 512, section 11.5) – is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process.

Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

As per claim 14, Miller fails to disclose:

An apparatus of claim 12, further comprising: the computer system programmed to re-transmit the event if a receipt confirmation message is not received from the local support computer.

Null discloses that TCP – a well known internet protocol in the art (page 512, section 11.5) – is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of

invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

As per claim 16, Miller fails to disclose:

An apparatus of claim 12, further comprising: the computer system programmed to hold the event in a queue if a receipt confirmation message is not received from the central repository, and to re-transmit the events in the queue after a period of time.

Null discloses that TCP – a well known internet protocol in the art (page 512, section 11.5) – is able to determine if a recipient has sent acknowledgement messages (ACK) back to the sender of the message, and to re-send the message if an ACK packet has not been received before a predetermined time period (figure 11.8, page 523). This protocol has the benefit of preventing packets from being lost in wide area network connections. Miller discloses that The Internet or any other wide area network may be used to connect the computer systems of his invention (column 10 lines 64-67). It is well known in the art that such wide area connections, though they are considered reliable, will periodically lose packets at some point in the data transmission process. Using TCP would enable the system to operate according to a widely adopted protocol which enhances reliability by preventing data packets from being lost in transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate TCP into the problem detection and resolution system of Miller, increasing reliability.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Urick whose telephone number is (571) 272-0805. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MTZ

Robert W. Beausoliel
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